CMA DISHMACHINES

MODEL EST

PARTS MANUAL

Rev.1.07

c UL us LISTED COMMERCIAL DISHWASHER 864T

INTERTEK ETL SANITATION LISTED

ENERGY STAR

ENERGY STAR PARTNER

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ALI GROUP FOODSERVICE EQUIPMENT

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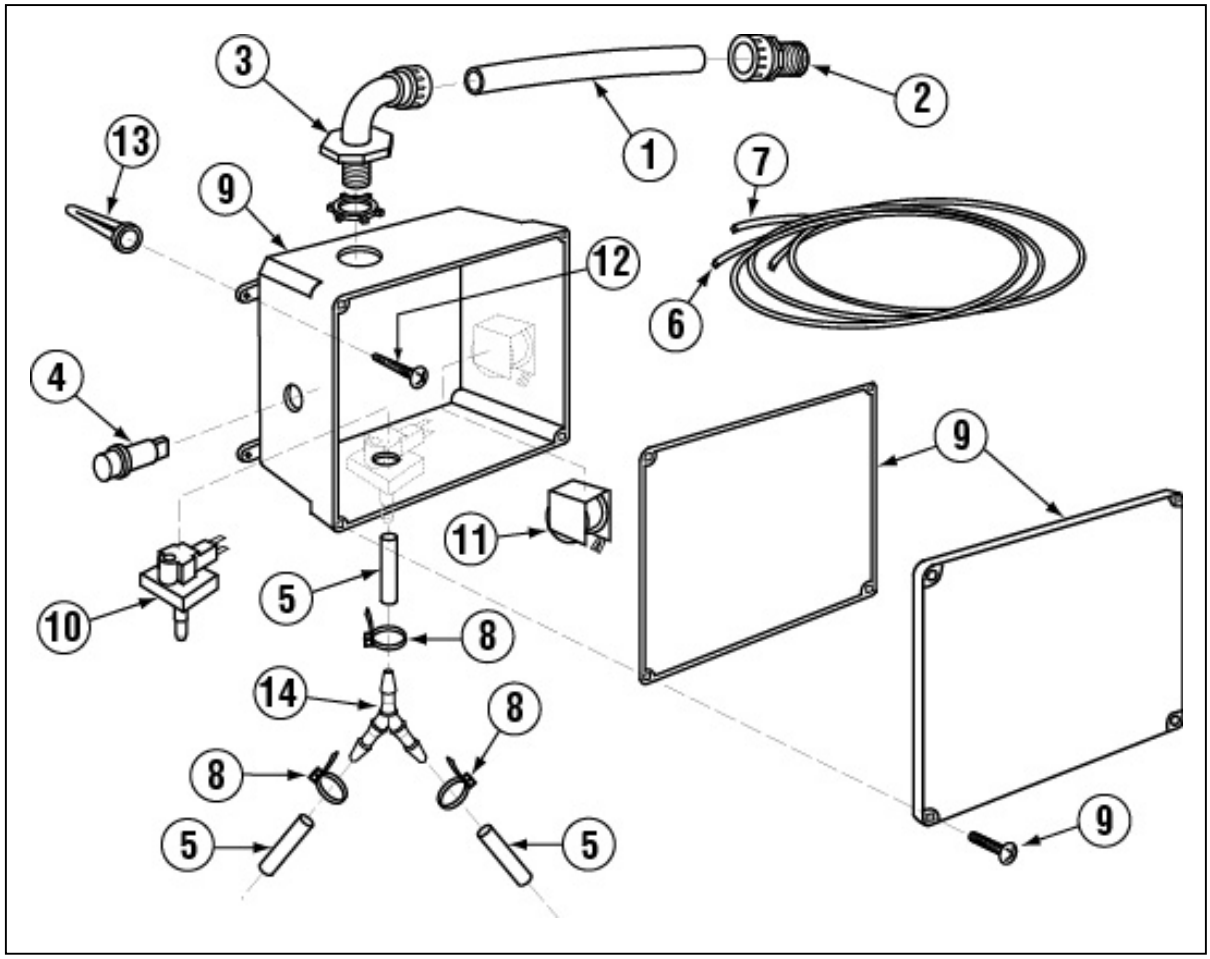
1. Parts Manual

1.1. Initial Parts Kit (P/N 01100.84)

P/N	DESCRIPTION	Qty
00104.50	Drain Motor, 120V 60Hz	1
00105.82	Drain Spring (V)	1
00108.82	Drain Actuator Arm (V)	1
00109.82	Drain Actuator Shaft (V)	1
00115.85	Drain Screen	1
00120.00	Thermometer	1
00121.60	Drain Diaphragm	1
00200.10	Pump Assembly, 110/220V 60Hz	1
00206.00	Pump Seal Kit	1
00308.20	Spray Arm End Plug, E-VA	1
00341.20	Spray Arm Bearing	1
00406.00	Control Box Light, .5” Diameter, Red	1
00407.83	Timer, 90 Sec, 8 Cam	1
00416.00	Peristaltic Pump Assembly, 120V/60Hz	1
00435.00	Squeeze Tube, 8”, Silicon	1
00470.10	Toggle Switch Rubber Boot	3
00471.10	Toggle Switch, Off/On, 20-Amp	1
00475.00	Toggle Switch, DPDT, 15-Amp, Delimer	1
00562.00	Door Limit Switch, Roller Action	1
00602.00	Door Spring	1
00631.00	Ice Cube Relay, 120V	1
00707.00	1/2" Water Solenoid Repair Kit, JE	1
00738.10	Solenoid Coil, JE, 120V (¾” & ½”)	1
00935.00	1/4-20 x 1/4" Allen Screw	2
00938.82	1/2” Drain Bushing, Brass (V)	2
03415.50	Flex-Tight Fitting	1
03470.00	Toggle Switch, Momentary, Screw Terminals	1
03623.00	1/2” Vacuum Breaker Repair Kit, Watts	1
00425.51	Chemical Tubing, Blue	50 ft
00425.53	Chemical Tubing, Red	50 ft
00425.54	Chemical Tubing, White	50 ft

1.2. Optional Sani Alarm

Part Number 12508.00



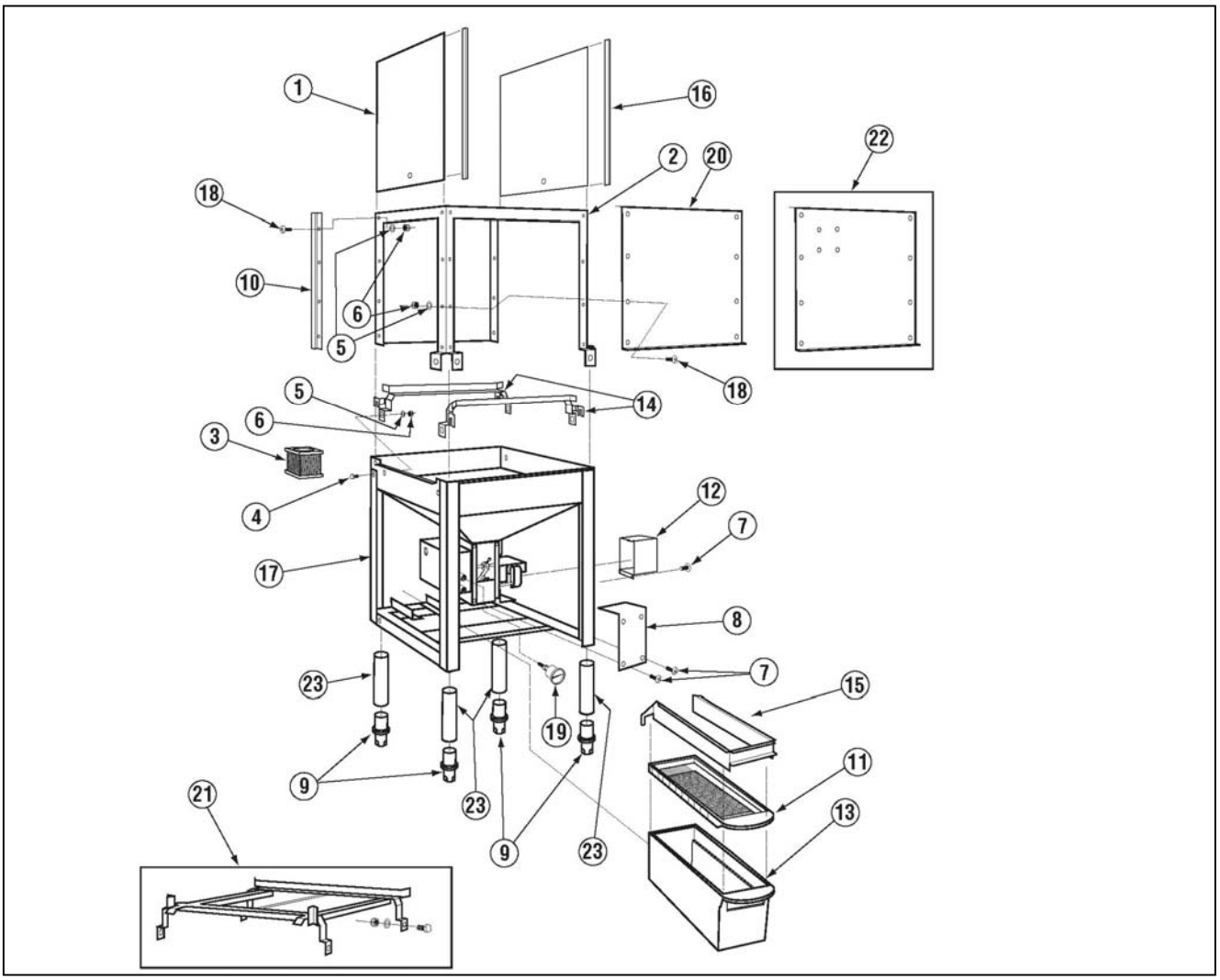
Exploded View

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	3	00400.00	Conduit, 3/8" Sealtite
2	1	00401.00	S.T. 3/8" Straight Connector
3	1	00402.00	S.T. 90 Degree 3/8" Connector
4	1	00406.00	Control Box Light, .5" Diameter, Red
5	1	00435.00	Squeeze Tube, 8"
6	1	00521.00	Wire, 18 Gauge, Orange, 6 ft.
7	1	00531.00	Wire, 18 Gauge, White, 6 ft.

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
8	5	00931.00	Wire Tie, Small
9	1	12510.00	Sanitizer Alarm Box Assembly
10	1	12511.00	Sanitizer Low Level Vacuum Switch
11	1	12512.00	Sanitizer Alarm Buzzer, 120 Volts
12	4	40126.10	#10 x 3/4" Sheet metal Screw
13	4	40127.00	Wall Anchors
14	1	00426.00	Y Hose Connector, 3/16"

1.3. Exploded View Drawings

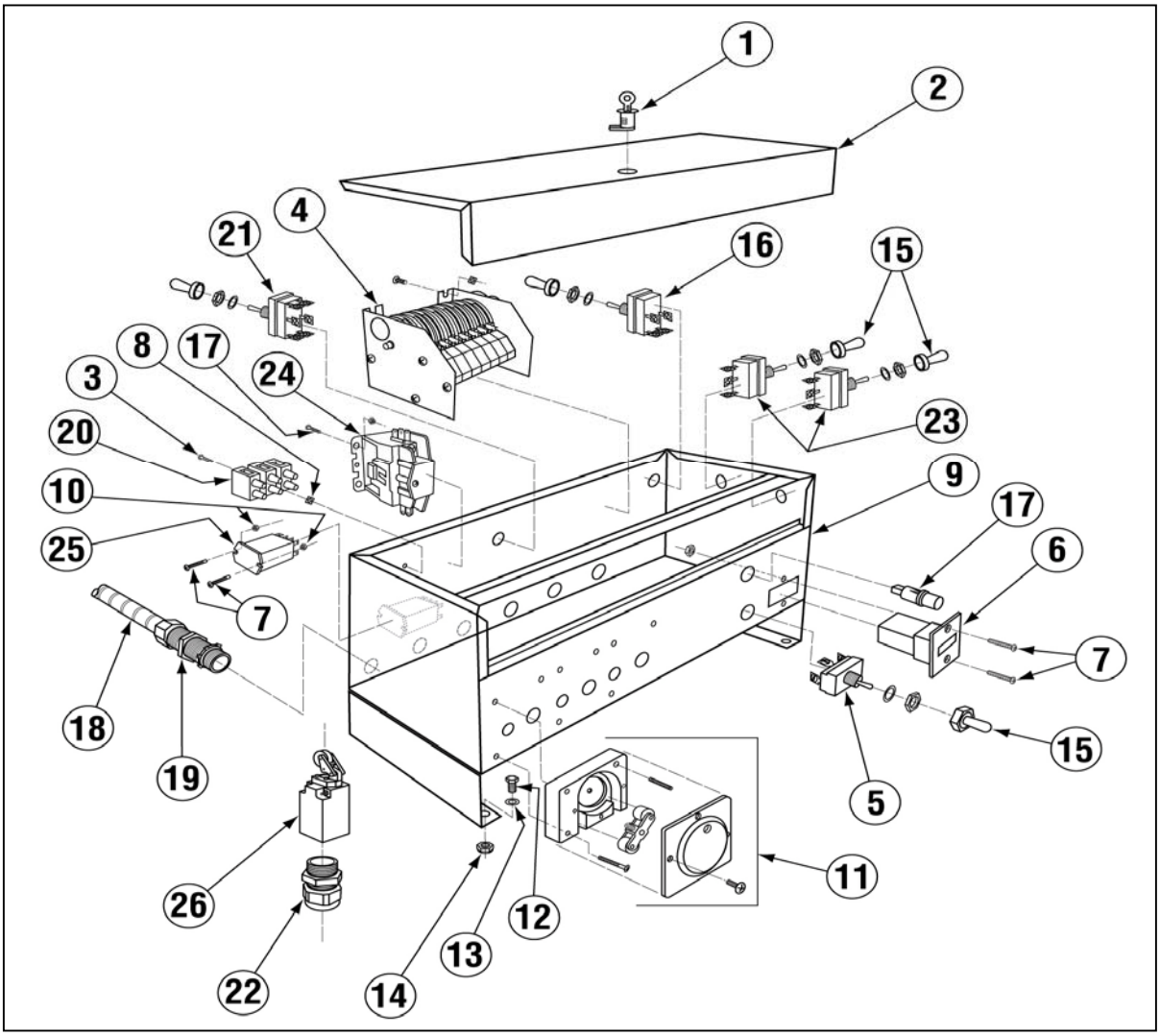
1.3.1. Cabinet Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	2	01506.30	Door
1	2	17506.00	CMA-180 Door (EVA Tall)
2	1	01530.50	EVA Wrapper 3 Door
2	1	01500.43	EVA Wrapper (EVA-Tall)
3	1	00115.85	Drain Screen
4	18	00906.00	1/4-20 x 1/2" Hex head Bolt
5	60	00924.00	1/4" SS Washer
6	40	00912.00	1/4-20 Nylon Lock Nut
7	6	00940.50	10-32 x 3/8" Truss Head Screw
8	1	00120.40	EVA Power Drain Cover
9	4	01310.00	Bullet Foot
10	4	01554.30	Ez Glide Door Guide SS 21 1/8
10	4	17554.00	CMA-180 Door Guide (EVA Tall)
11	1	01577.20	Scrap Trap Drawer
12	1	01573.30	Sani Mount/Drain Lid

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
13	1	01577.10	Scrap Trap Body
14	2	01505.32	Tray Track, Inline
15	1	01579.50	EVA Splash Card
16	4	00636.10	EZ Glide Door Guide Sq 21-7/8"
16	4	00636.17	EZ Glide Door Guide 26-1/4" (EVA Tall)
17	1	01502.50	EVA Pan / Stand Low Water
18	16	00905.00	1/4-20 x 1/2" Truss Head Bolt
19	1	00120.00	Thermometer (Bi Metal)
20	1	01540.40	Wrapper Panel E-AH w/o holes
20	1	01540.44	Wrapper Panel E-EVA –AH (EVA-Tall)
21	1	01505.20	Tray Track, Corner
22	1	01540.39	Wrapper Panel EVA-C
22	1	01540.43	Wrapper Panel EVA-C Tall
23	4	01572.10	SS Leg

1.3.2. Control Box Assembly



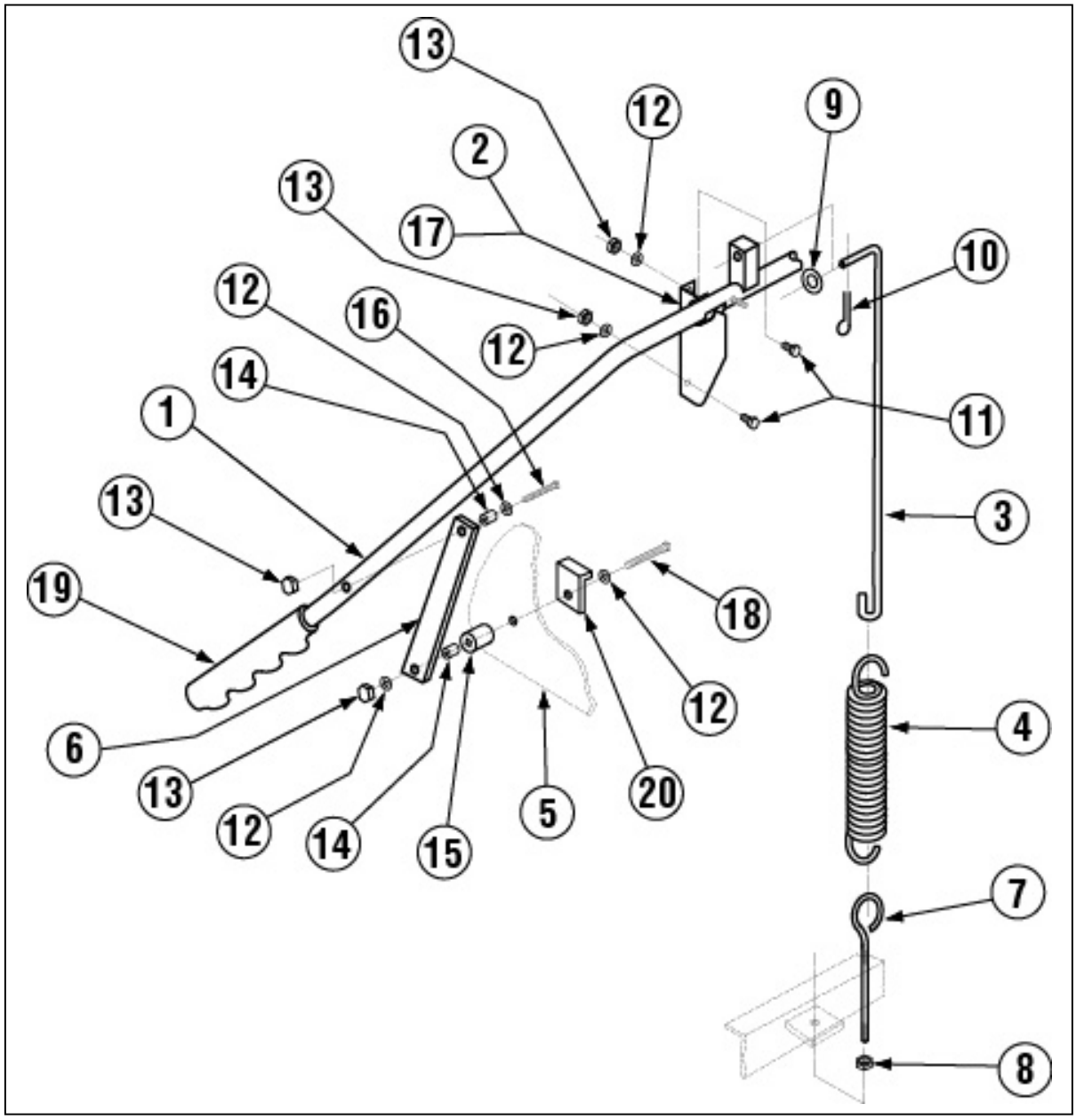
Note: *Wiring Harness (V)—Part Number 00414.82—(not shown).*

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00449.00	Lock and Key
2	1	01504.09	Control Box Lid
3	5	00911.50	8-32 x 3/8" Pan Head Screw
4	1	00407.83	Timer, 90 Seconds
5	1	03470.01	Toggle Switch, Momentary
6	1	03408.50	Counter (Face Mount)
7	4	00907.00	6-32 x 1/2" SS Pan Head Screw
8	4	00917.00	8-32 PM Nut
9	1	01503.09	Control Box Body
10	4	00916.00	6-32 pm nut
11	3	00415.00	Peristaltic Pump Assembly*****
12	4	00906.00	1/2-20 x 1/2" Hex Head Bolt
13	4	00924.00	1/4" SS Washer
14	4	00912.00	1/4-20 Nylon Lock Nut

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
15	5	00470.10	Toggle Switch Boot
16	1	00471.10	Toggle Switch Off/On 20 Amp
17	2	00406.00	Control Box Light, 120V, 60Hz
18	1	00400.00	Conduit, 3/8" Sealtite
19	3	00401.00	S.T. 3/8" Straight Connector
20	1	00454.10	3-Pole Socket Terminal Block
21	1	00475.00	Toggle Switch, 15 Amp
22	1	00562.60	Connector, #562 Door Limit Switch
23	2	03470.00	Toggle Switch
24	1	00404.82	Contactor Relay
25	1	00631.00	Ice Cube Relay
26	1	00562.00	Door Limit Switch, Roller Action

*******See section **1.3.10 Peristaltic Pump Assembly** for details*

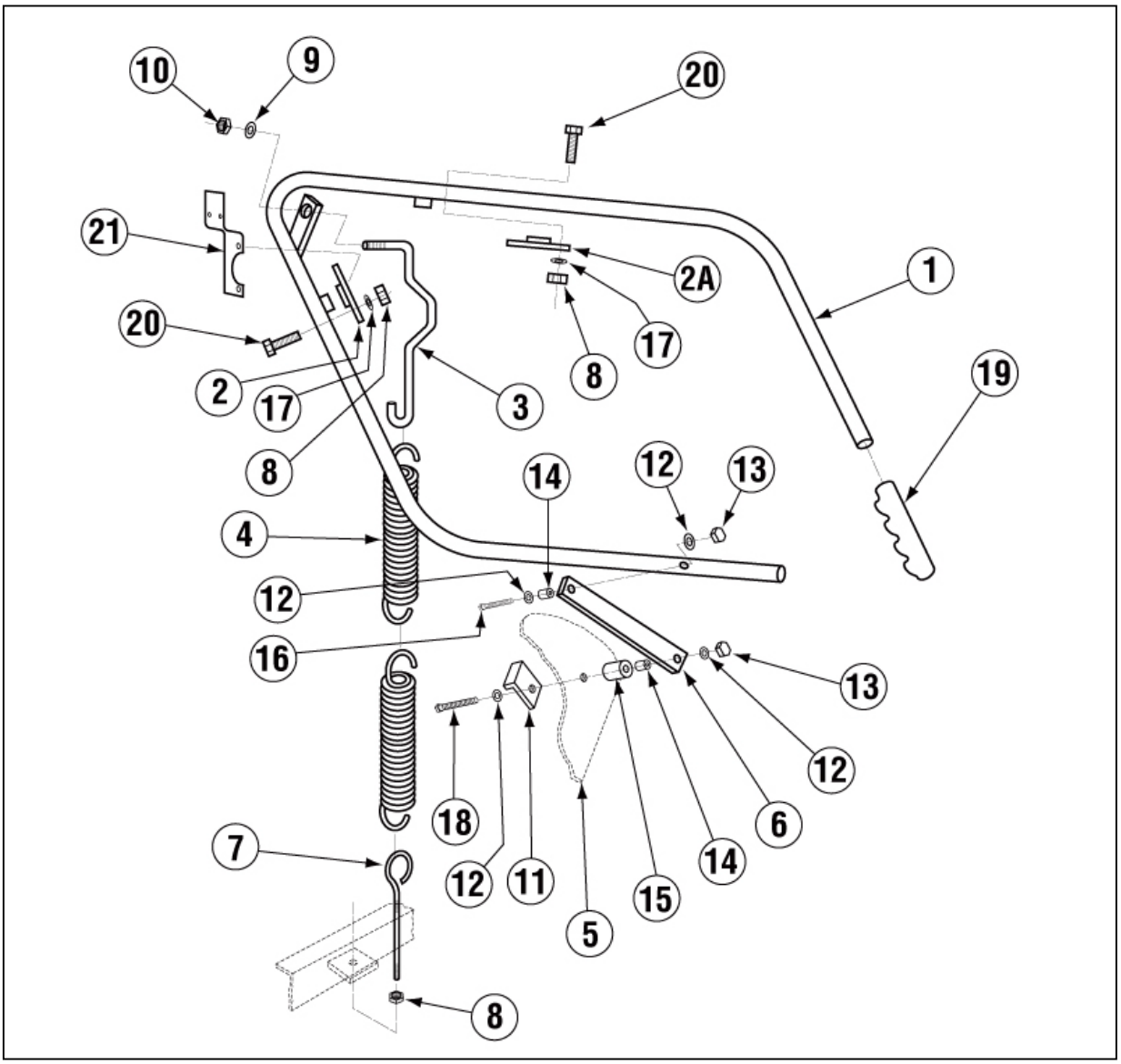
1.3.3. Door Actuator Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00613.32	Door Handle, 1"
2	1	01556.50	Door Handle Support, 1" (Right)
3	2	00603.07	Door Spring Extension Rod
4	2	00602.00	Door Spring
5	2	01506.30	Door (Cut Away)
6	2	01553.00	Door Handle Link
7	2	00606.00	5/16-18 x 7" Eyebolt
8	2	00913.00	5/16-18 Nut
9	2	00926.00	5/16" SS Washer
10	2	00900.00	Cotter Pin

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
11	4	00906.00	1/4-20 x 1/2" Hex Head Screw
12	6	00924.00	1/4" SS Washer
13	8	00912.00	1/4-20 Nylon Locknut
14	4	00610.00	Door Handle Spacer, Small
15	4	00611.00	Door Handle Spacer, Large
16	2	00910.00	1/4-20 x 1-1/2" Hex Bolt
17	1	01555.50	Door Handle Support, 1" (Left)
18	2	00903.00	1/4-20 x 1-3/4" Hex Head Bolt
19	2	00607.04	Door Handle Cap, 1"
20	2	01552.00	Door Stop

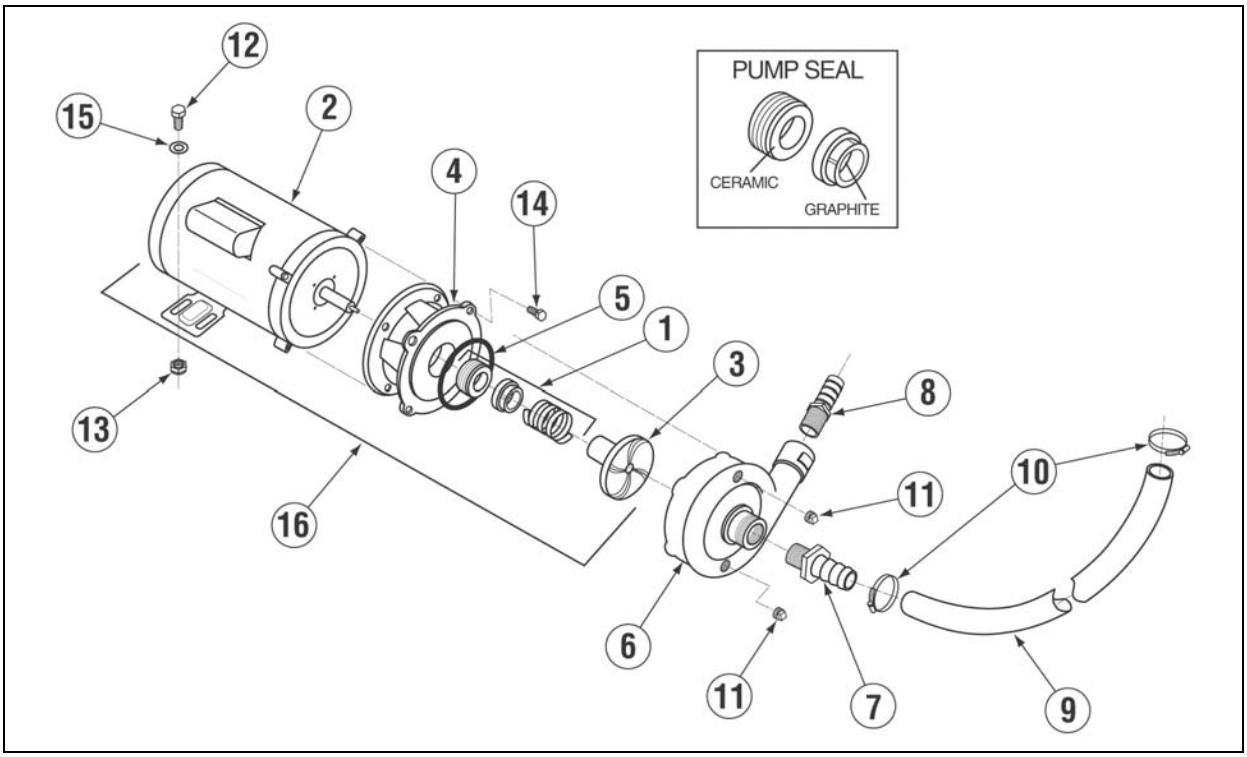
1.3.4. Door Actuator Assembly for Corner EST



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00613.44	Door Handle EVA-C
2	1	00619.34	Door Handle Mounting Plate, Long
2A	1	00619.44	Door Handle Mounting Plate, Short
3	1	00603.86	Extension Rod EVA-C
3A	1	00604.84	Door Extension Link
4	2	00602.00	Door Spring
5	2	01506.30	Door
6	2	01553.00	Door Handle Link
7	1	00606.00	5/16-18 x 7" Eyebolt EVA-C
8	9	00913.00	5/16-18 Nut
9	9	00926.00	5/16 SS Washer
10	1	13805.00	5/16-18 Nylon Lock Nut

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
11	2	01552.00	Door Stop
12	6	00924.00	1/4" SS Washer
13	4	00912.00	1/4-20 Nylon Lock Nut
14	4	00610.00	Door Handle Spacer, Small
15	4	00611.00	Door Spacer, Large
16	2	00903.00	1/4-20 x 1-3/4" Hex Head Bolt
17	8	00926.00	5/16" SS Washer
18	2	00910.00	1/4-20 x 1-1/2" Hex Head Screw
19	2	00607.04	Door Handle Cap
20	8	00920.00	5/16-18 x 3/4" Hex Head Bolt
21	1	00563.20	Limit Switch Door Bracket, E-VAC

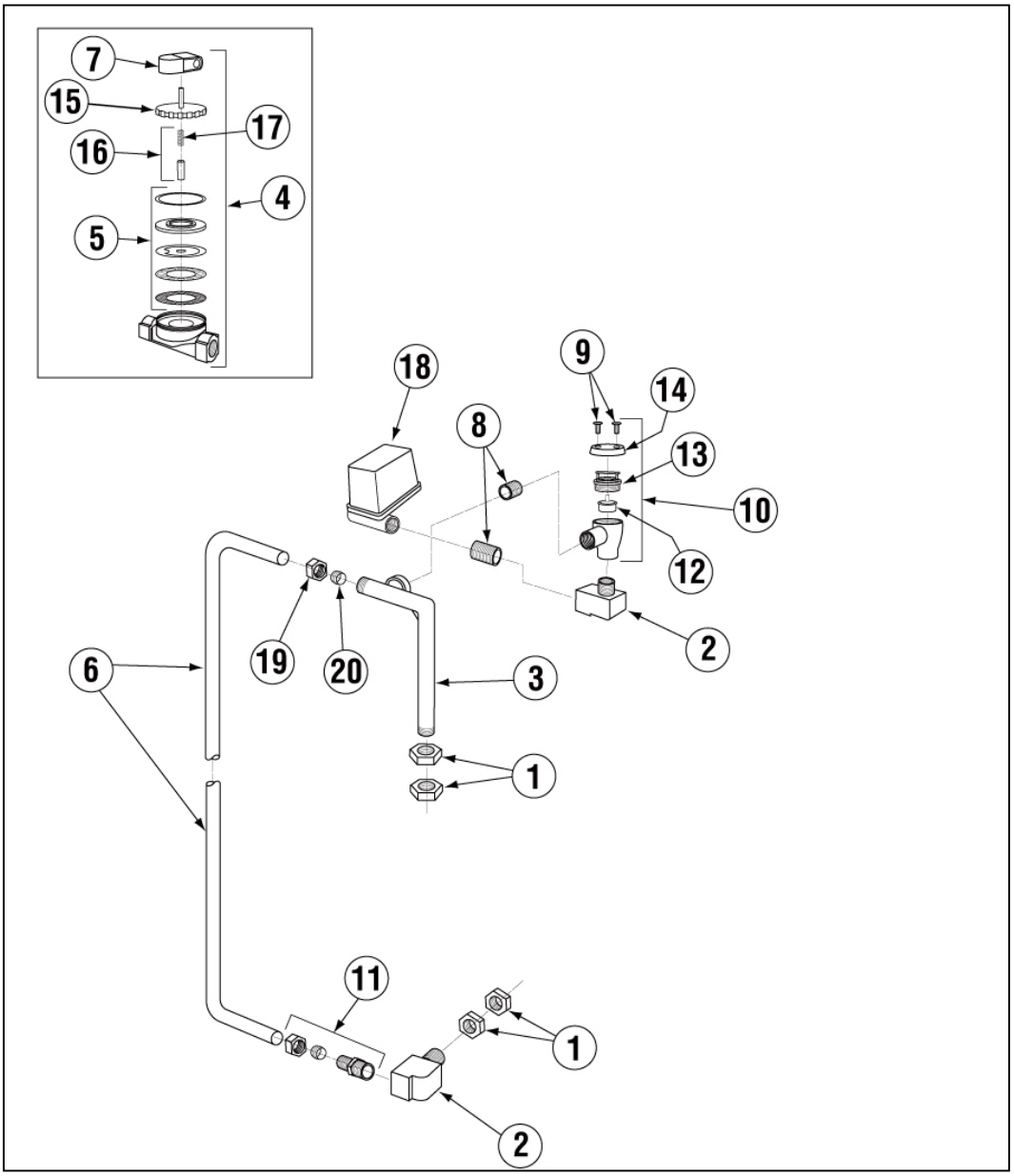
1.3.5. Pump Assembly



Item	Qty	PartNo	Description
1	1	00206.00	Pump Seal Kit
2	1	00201.00	Pump Motor 1Hp 115/208-230V
3	1	03222.05	Impeller (Universal) Open
4	1	03224.00	Pump Base
5	1	03226.00	Pump O Ring Gasket
6	1	04206.00	Pump Cover
7	1	50302.40	1 ¼ MIP X 1" Barb Fitting
8	1	50302.06	1" MPT X 1" Barb PVC Sch 80

Item	Qty	PartNo	Description
9	1	03108.61	Tranfer Hose 1"
10	2	03101.00	Hose Clamp # 16 1"
11	2	00238.00	3/8 Male Plug
12	1	00906.00	1/4-20 X 1/2 Hexhead Bolt
13	1	00912.00	1/4-20 Nylon Lock Nut
14	4	00921.00	3/8-16 X 3/4 SS Hexhead Bolt
15	1	00924.00	1/4 SS Washer
16	1	00200.10	Pump Assy 110/220V 60Hz open

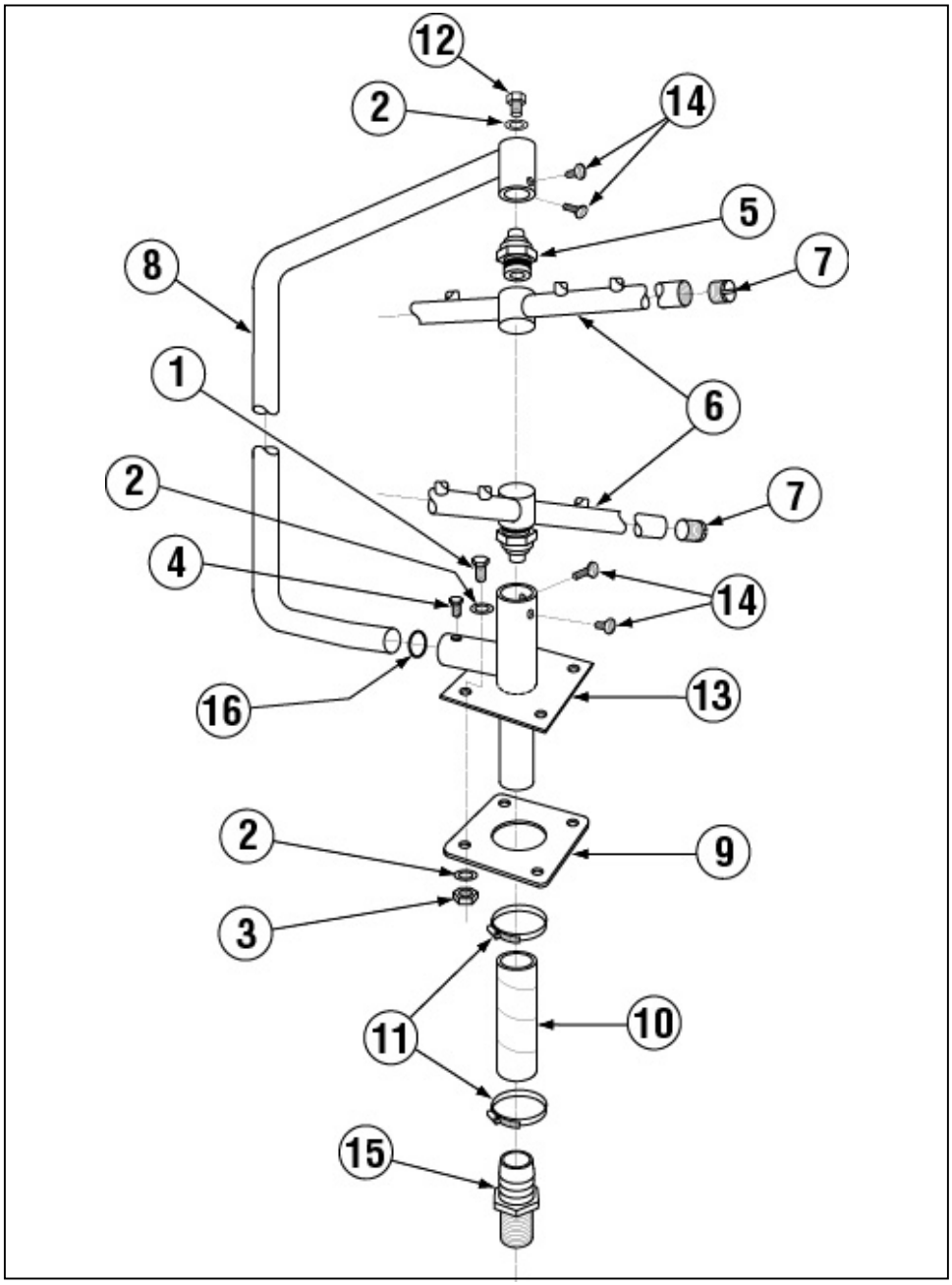
1.3.6. Plumbing System Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	4	00721.00	1/2" Jamb Nut
2	2	00745.00	1/2" Street Elbow
3	1	00770.00	Water Inlet Elbow Assy
4	1	03603.10	1/2" Water Solenoid Assembly, J/E*
5	1	00707.00	1/2" Water Solenoid Repair Kit
6	1	00796.20	Flush Tube
7	1	00738.10	Water Solenoid Coil
8	2	00742.00	1/2" x 1-1/2" Brass Nipple
9	2	00421.51	6-32 x 1/4" Pan Head Screw
10	1	03624.00	Vacuum Breaker Assembly, Watts**

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
11	1	00760.00	5/8" Compression x 1/2" MIP Adapter
12	1	03623.00	1/2" Vacuum Breaker Repair Kit
13	1	03624.25	1/2" Vacuum Breaker Bonnet, Brass
14	1	00739.50	Vacuum Breaker Cap, SS (fits ½" or ¾")
15	1	03603.20	1/2" Water Solenoid Bonnet
16	1	00786.00	Water Solenoid Valve Plunger w/Spring
17	1	00706.10	Valve Plunger, Spring Only
18	1	03604.00	SS Water Solenoid Valve 1/2"
19	1	00710.10	5/8 Compression Fitting Nut
20	1	00710.20	5/8 Compression Fitting Ring

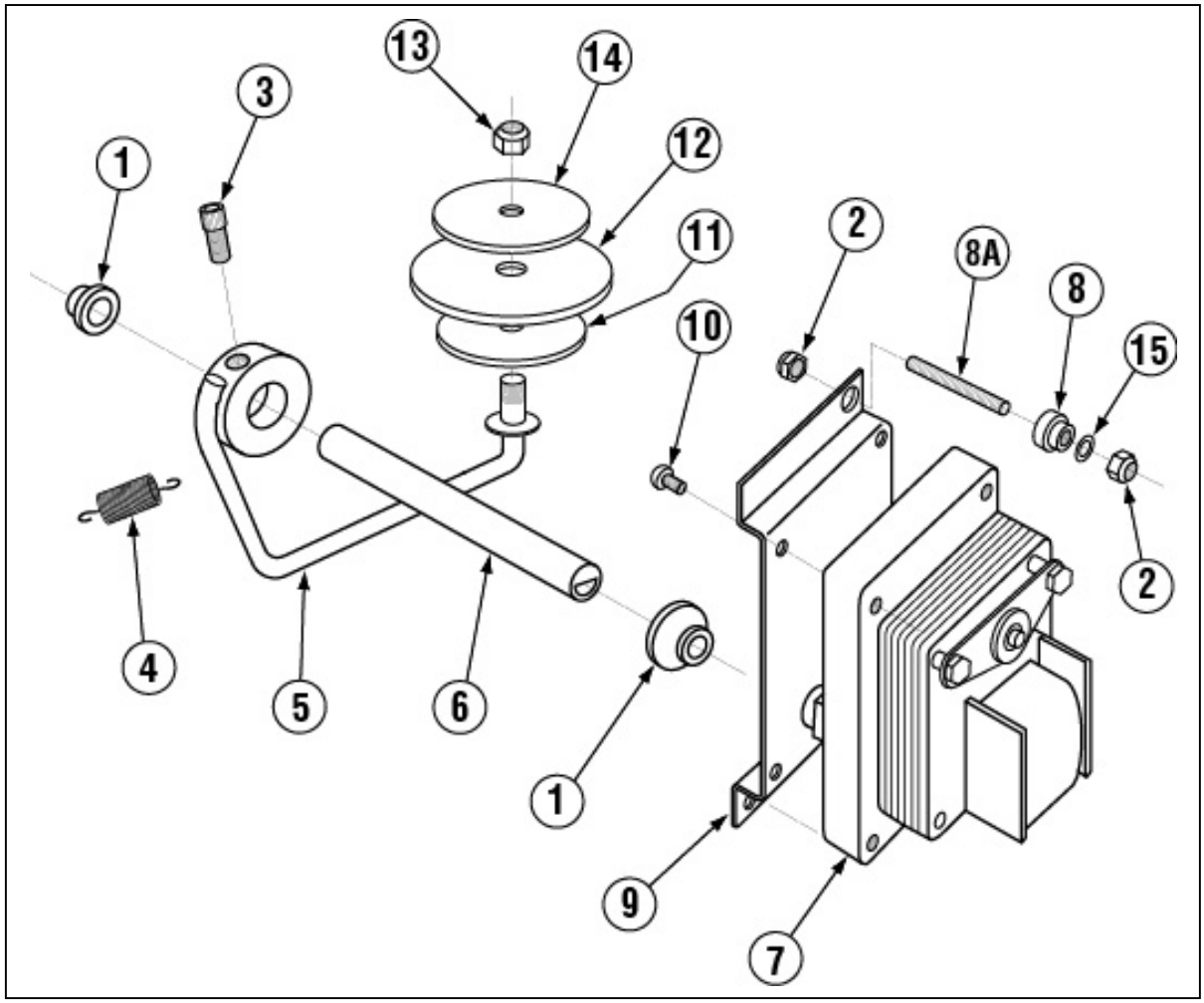
1.3.7. Spray System Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	4	00914.00	1/4-20 x 3/4" Hex Head Bolt
2	9	00924.00	1/4" SS Washer
3	4	00912.00	1/4-20 Nylon Lock Nut
4	1	00966.10	10-32 x 1/4" Hex Head SS Bolt
5	2	00341.00	Spray Arm Bearing
6	2	00304.06	Spray Arm A/C Series
7	4	00308.50	Spray Arm End Plug SS
8	1	00305.20	Spray Manifold, N- EVA 2007
8	1	00305.22	Spray Manifold, EVA Tall

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
9	1	04306.00	Square Manifold Gasket
10	1	03108.81	Discharge Hose EVA 8 ¾"
11	2	03101.00	Hose Clamp
12	1	00905.82	1/4-20 x 3/8" Truss Head Bolt
13	1	00357.20	Lower Spray Base, N EVA 2007
14	4	00955.00	5/16-18 x 5/8" Thumbscrew
15	1	50302.06	1" MPT X 1" Barb PVC Schedule 80
16	1	00302.84	Spray Base 0-Ring, E-VA

1.3.8. Power Drain Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	2	00938.82	1/2" Drain Bushing, Brass (V)
2	4	03801.00	10-32 Lock Nut
3	1	00906.82	1/4-20 x 5/8" Socket Head Screw
4	1	00105.82	Drain Spring (V)
5	1	00108.82	Drain Actuator Arm
6	1	00109.82	Drain Actuator Shaft (V)
7	1	00104.50	Drain Motor, 120V 60Hz
8	2	00109.40	Shoulder Nut, SS

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
8A	2	00109.50	10-32 x 1" Stud
9	1	01511.84	Drain Motor Bracket – 3rd Generation
10	2	00941.00	10-32 x 5/8" Pan Head Screw
11	1	01520.82	Diaphragm Support Disk, 1-1/8"
12	1	00121.60	Drain Diaphragm
13	1	00912.00	1/4-20 Nylon Lock Nut
14	1	01521.82	Diaphragm Support Disk, 2"
15	2	04806.00	#10 Brass Washer

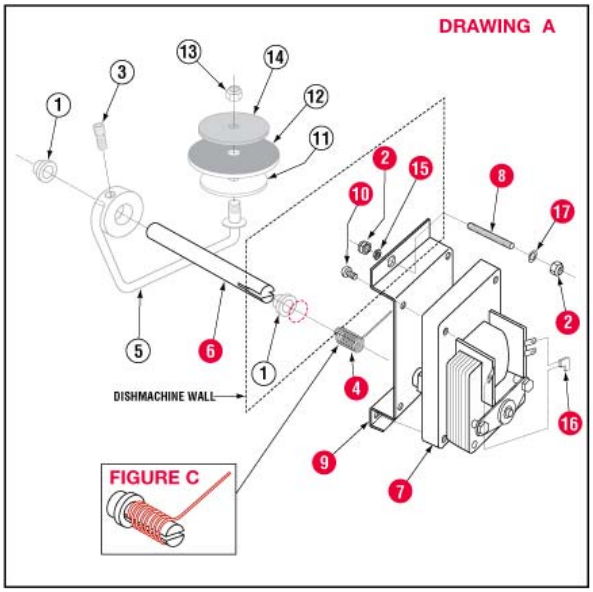
1.3.9. Power Drain Retrofit Kit p/n 00104.95

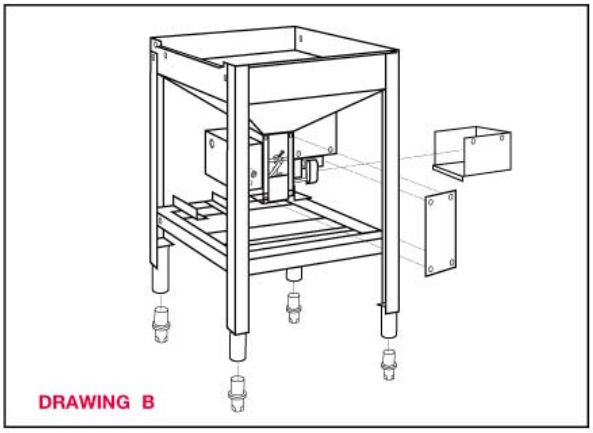
POWER DRAIN KIT
P/N 00104.95

11-14-07

POWER DRAIN ASSEMBLY INSTRUCTIONS

1. Remove drain lid and power drain cover (see drawing B).
2. Remove hardware securing drain motor. Discard all hardware holding motor in place.
3. Remove and discard motor bracket from motor, but save two (#10) 10-32 screws.
4. Install hardware (#2, #8, #15). Thread two (#8) studs through tank and secure in place with (#2) nylon lock nuts. On the outside of tank install (#15) thin nut onto the (#8) stud and secure. **NOTE:** The (#15) thin nut serves a very important purpose in drain function.
5. From kit install new drain motor bracket to drain motor with two saved (#10) 10-32 screws.
6. Remove drain shaft by loosening (#3) screw on (#5) drain actuator arm. Discard drain shaft.
7. Install the new (#6) drain shaft from the kit and align drain actuator arm to the tank using the (#3) set screw. Make sure the flat side of the (#6) drain shaft has the (#3) set screw tightening against it.
8. Install (#4) drain spring properly on drain shaft and pay particular attention to the positioning of the long arm on spring. The long arm will rest against the top right side of drain motor bracket. (See drawing A). Install short end of spring into slot of drain shaft. (See figure C).
9. Align the shaft of the (#7) drain motor with (#6) drain actuator shaft slot as motor is placed into position. Drain motor bracket with motor attached is secured to (#8) studs using (#2 and #17) nylon lock nuts and washers.
10. Grease the drain shaft and (#1) drain bushings. Replace drain lid and drain cover. When drain kit has been completed, energize drain several times and check its function. **NOTE:** Remove electrical spade connectors from wires leading to drain motor and replace with two (#16) flag terminals supplied in drain kit. This will allow proper clearance between drain lid and flag terminals.





ITEM NO.	NO. REQ'D	DESCRIPTION
1	2	P/N 00938.82 Drain Bushing
2	**2**	**P/N 03801.00 10/32 Nylon Lock Nut**
3	1	P/N 00906.82 Socket Head Screw
4	**1**	**P/N 04103.14 Drain Spring**
5	1	P/N 00108.82 Drain Actuator Arm
6	**1**	**P/N 00109.60 Drain Shaft EVA**
7	**1**	**P/N 00104.50 Drain Motor 120V**
8	**2**	**P/N 00109.50 Drain Mounting Studs**
9	**1**	**P/N 01511.86 Drain Motor Bracket**
10	**4**	**P/N 00941.00 10-32X5/8 PanHead Screw**
11	1	P/N 01520.82 Support Disk
12	1	P/N 00121.60 Drain Diaphragm
13	1	P/N 00912.00 Nylon Nut
14	1	P/N 01521.82 Two Inch Support Disk
15	**1**	**P/N 03801.20 10/32 Thin Nut**
16	**2**	**P/N 00557.20 Flag Terminal 14-16 GAUGE**
17	**2**	**P/N 00924.00 SS Washer**

NOTE: ***Items in bold are included in the Power Drain Kit."All items in power drain kit must be used for drain to operate properly"***

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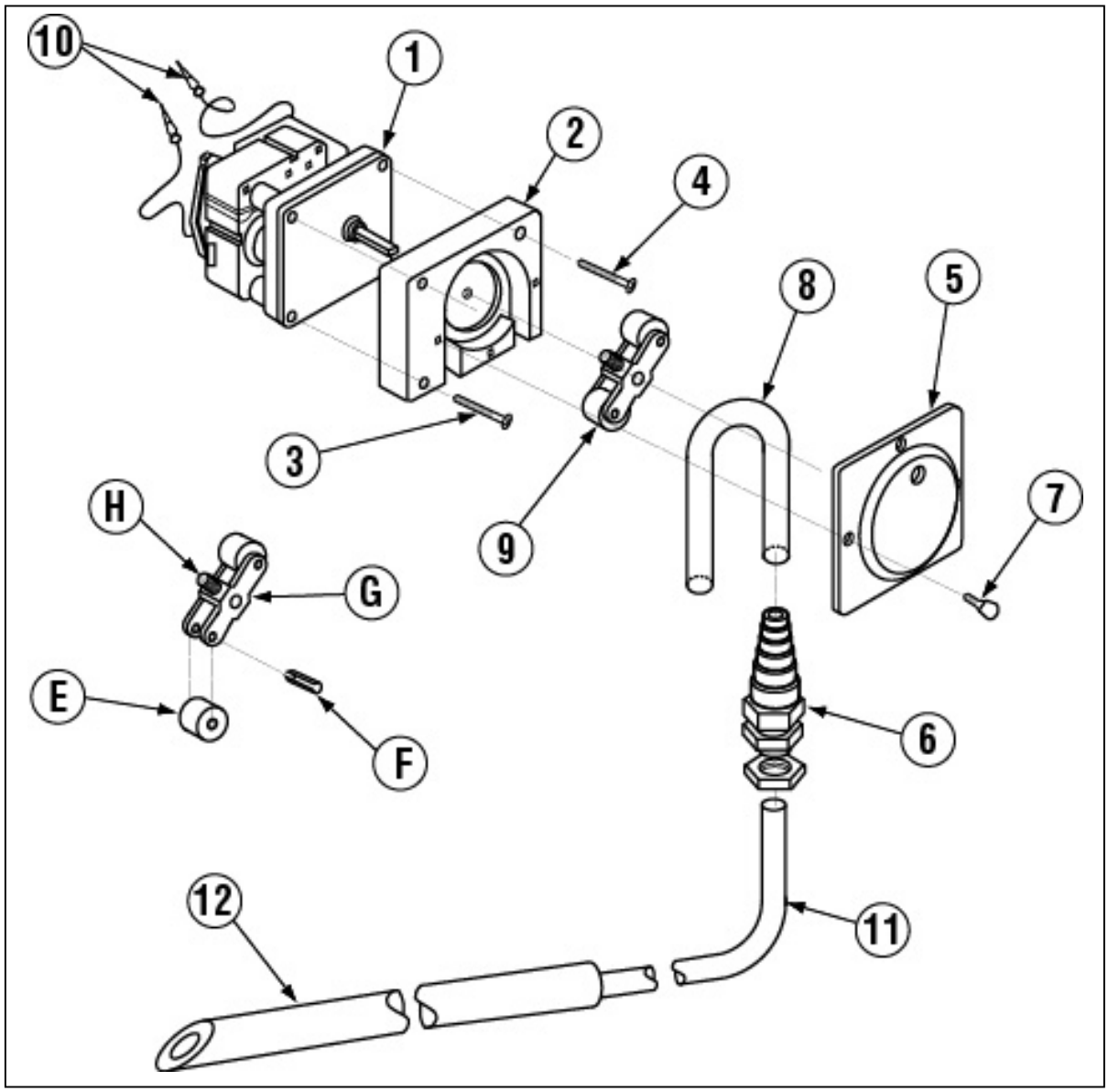
1.3.10. Peristaltic Pump Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00416.00	Peristaltic Pump Motor
2	1	00417.00	Peristaltic Pump Block
3	2	00919.00	10-32 x 1-1/2" Pan Head Screw
4	1	00918.00	10-32 x 1-1/2" Fillister Head Screw
5	1	00418.00	Peristaltic Pump Block Cover
6	1	03415.50	Flex-Tight Fitting
7	4	00911.00	8-32 x 1/2" Pan Head Screw
8	1	00435.00	Squeeze Tube
9	1	00419.00	2-Bearing Rotor Assembly

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
E	2	00423.00	Rotor Bearing
F	2	00422.00	Rotor Bearing Pin
G	1	00424.00	Rotor Bearing Carriage
H	1	00935.00	1/4-20 x 1/4" Allen Screw
10	2	00448.00	Barrel Connector, Male
11	1	00425.51	Chemical Tubing, Blue
		00425.53	Chemical Tubing, Red
		00425.54	Chemical Tubing, White
12	1	00443.00	Tube Stiffener